

Abgrund, ein Traktat über die Logik der Menschenschaft

Abgrund, a tractatus about the logic of people-ness

§1

This is the system called Abgrund $S \setminus Abgrund$ as a reexpression of the author's thoughts.

The goal given as $(?)$ is to formalize firstly a system with which any scientific fact can be expressed. This is done based on a theory of flow where everything can be derived and described via entities. These versatile entities must be given $(!)$ to conclude all else. So the following thesis can be announced: **#about**

(T) Any scientific proposition can be expressed and explained using the flow. (1.)

§2

A weak proof is given in the following: $(P\{)$ Any description about reality (perception) remains informative even fictional. Normative descriptions (laws) only apply to subjects derived from people's thoughts such as laws of nature and ethics, nature sciences and other forms of communication. Everything expressed is assumed to be true $(A) E = true$ unless expressed otherwise nE . When some thing B is expressed then there is always some other thing 'hidden' H not expressed. **#hidden**

$$(D) B \implies (A) B H \quad (2.)$$

§3

Basically one entity is written as sequence of characters and only a space ' ' distinguishes it from the other. So any concatenation expresses one entity. Parenthesis $()$ and similar do the exception. The entity classes are named as follows: **#expression**

(C) *Expression(propotion propotion ...)* or *propotion Expression propotion*

§4

This said every entity E has some identification $i()$ which expresses only the entity in itself. If the identification starts with an upper case character then it is a

base expression. Lower case starting identifications are 'propositions' for the expression. The entity is a picture $\mapsto$ of some preimage.

$$\textcircled{D} 'Preimage' \mapsto E \quad (4.1.)$$

$\textcircled{L}$ Preimages are not expressed. This makes them ideal (unfiltered, unperceived, unmanipulated) while entities are their ideas (filtered, virtualized, simulated). Consequently the preimage denotes : the entity as a convention, also being implicitly stronger $>$. #picture #preimage

$$\textcircled{C} E \implies 'Preimage' : Entity =: E \quad (4.2.)$$

§5

Note that entities on the left get evaluated first. But for the likes of equal identity $\equiv$, equal meaning $=$ and the sole expression in itself it does not have to hold. #order

$$\textcircled{D} B (1\ 2) \equiv (2\ 1) \quad (5.)$$

§6

Entities are identified through some meta-expression property Π indicated by Greek letters. Properties are assumed by some observer C with perception and memory to distinguish one thing from another. #property

$$\textcircled{D} \text{Property} : \Pi = C(a \subset b) \quad (6.1.)$$

Example Bee has at least three properties attributed:

$$\textcircled{E} \text{ExampleBee}(\gamma, \delta, \omega) \quad (6.2.)$$

§7

Properties are attributed through grouping $E(\Pi)$ or attribution E . Π and are handled as objects. But because of their meta character attributing properties does not change the picture. C also establishes categories based on properties as a convention. object and attributes belong to a larger picture, the concept, which by convention is simply called object. The whole system created $\forall CE$ by an observer is a view V . #view

$$\textcircled{D} \text{View} : V = \forall CE \quad (7.)$$

§8

Views of a system combined $\forall V$ are called a world W . #world

$$\textcircled{D} \text{World} : W = \forall V \quad (8.)$$

§11

Upon creation a world system is either ultimately possible or impossible. Expressions then set (constraining) laws for possible concepts or (permissioning) rights for the impossible, altogether called 'rules'. For example in Abgrund all is possible by default and expressions constrain the system. Abiding the known (expressed) rule entities are called to be behaving $\textcircled{B}$. It must be assumed that some rule is unaccounted for if behaviour does not apply. Alternatively for an ideal machine all is impossible. Feeding it with rights - the program code - it is only capable of utilizing just that. #law #right #rule #behaviour

§12

Up until now there have mostly only been constants Z used for expressing. But constants fairly describe our dynamic world. So a new entity called process denote some preimage like change. #process

$$\textcircled{D} !'change' \mapsto process \quad (12.1.)$$

Change defines some relevant difference between two states expecting there is one.

$$\textcircled{D} change : |1E - 2E| \wedge 1E \neq 2E \quad (12.2.)$$

§15 Path

A path is an entity formed from entities appearing in sequence, also notice the notation as range:

$$\textcircled{E} path : 1E \ 2E \ 3E \ 4E =: R(1 \ 4) * E \quad (15.)$$

Of one entity all path-related entities are called a filter $F : \forall A. Path.$ From a filter all entities of selected properties are called a phase. #phase #filter

#range #path

§16

Taken all static objects of a specific unicorn into account the entity received would come close to the unicorn as a process.

$$\textcircled{W} \sum Unicorn \approx unicorn \quad (16.)$$

§17

A new entity can be formed into a union, a non-sequential combination of entities. #union

$$\odot \text{ union} : 1E \ 2E \ 4E =: 5E \quad (17.1.)$$

Entities can be formed into an intersection if entities share properties like man and Plato and so do Tom and Jerry. **#intersection**

$$\textcircled{D} \text{ intersection} : 1E = 2E \cap 3E \quad (17.2.)$$

Entities are ideal if they do what they ought to independently of the conditions served. By convention all word entities *word* are ideal. Unlike for example the power of $-1 \uparrow -1$ or classically $()^{-1}$ and also $g'(x)=1-f'(x)$ an ideal inverse *inverse()* therefore always holds such that **#ideal** **#inverse**

$$\textcircled{D} \text{ inverse} \left(\frac{B}{A} \right) \equiv \frac{A}{B} < \quad (17.3.)$$

$$\textcircled{D} \text{ inverse}(A \ B) \equiv (B \ A) \quad (17.4.)$$

§18

Now what makes one entity interact with this and not with that could not be explained sufficiently. As a fallback units $\textcircled{C} !U$ are required. A unit U acts like an identity i but instead is not (supposed to be) unique. Only entities of the same unit should interact with each other.

$$\textcircled{E} U(1)E \ U(1)E \ U(2)E = U(1)E2 \ U(2)E \quad (18.)$$

Coupled with an identity we can write iUE . **#unit**

§19

Generally the meta level M can be applied to any entity E^M . If pictures of different meta levels are processed with each other they behave differently than those of the same meta level even if they have the exact same unit.

#meta_level

$$\textcircled{E} 2^1 + 3^1 \neq 2^2 + 3^2 \quad (19.1.)$$

A more classical explanation of the same process on different meta levels ($+$, $\times$, $\uparrow$):

$$\textcircled{E} 2 + 3 = 5 \neq 2 +^2 3 = 6 \neq 2 +^3 3 = 8 \quad (19.2.)$$

§20

It is fact that some expression only explains what it means but not how it means. This is also via meta level. While expressing some how-meaning it becomes its own what-meaning, another how-meaning must be expressed to explain the previously expressed. Think of something static as zeroth meta level, it can be

explained through the way it behaves. Behaviour as a process is first meta level though, relating objects, it can be explained through the way it relates such as with rules. Relation is second meta level explained through the way the relations relate and so on. But instead of thinking in meta levels one should think of how entities are tied in relation. Generally the meta level is asserted from the properties. #what #how #entity

$$\textcircled{D} \forall \Pi(B^1) \vdash B^2 \quad (20.)$$

§21

Modality rules as meta-expressions enable to sort expressions by strength. Some are global, valid across the system and all publications - and local, only valid in the current document. Here some summary: there exists the fulfilled, global existence - !!conflict-law $\textcircled{L}$ which **must** hold when expressed. The others are only satisfactory (weaker) but global: the definition $\textcircled{D}$ **should** apply, the convention $\textcircled{C}$ **may** apply. **Must not** $\textcircled{nL}$ cancels the expression. And for the purpose of some current work local rights are set: the hypothesis $\textcircled{H}$ for which the fulfilled existence must be proven, the supposition $\textcircled{S}$ **shall** apply, the assumption $\textcircled{A}$ **could** apply so far for constraining systems.

On the other hand permissioning systems include **might** as assumption $\textcircled{A}$, **can** as supposition $\textcircled{S}$ and **do** as !!conflict-law $\textcircled{L}$. Given those definitions triggers become influences inducing more diverse rules. #modality #necessity

§22

If exactly one possible outcome of an entity is possible then the entity's existence is sufficient = 1. Sometimes it is not ≤ 1 . The satisfied propositions so called choices altogether represent the entity's field F in a probability distribution. #field

$$\textcircled{D} FE := \forall Choices \quad (22.)$$

§23

Some entities only appear at certain meta levels while others are being 'occasional' (appearance depends on higher meta levels). This is also represented in their field. These must span across multiple meta levels in order to be perceived by people but be ruled in another. #occasional

Goal theory

§24

All expressions can be taken to be goal-driven or at least -oriented. A goal $\textcircled{G}$ is to be chosen for which information is insufficient. Information are properties called propositions because they themselves may be insufficient. Propositions $\Pi := (1\Pi\ 2\Pi\ 3\Pi\ \dots)$ could be steps leading towards some goal $Z := (1\Pi\ 2\Pi\ 3\Pi\ \dots)$. #goal

$$\textcircled{D} \sum \Pi = l(Z) \quad (24.1.)$$

Hence propositions assumingly have an influence on the outcome of a goal. Generally that a proposition is influential can be expressed with the process 'influence' e . The **effect** is then either influencing towards $+e$ 'must' or away $-e$ 'must not' from the goal. **Affect** $\pm a = ne$ is influence on not-goal entities. Either one of those implies meaning by definition. Despite the causation no scalar is needed; either it triggers the change, does not, or influences both $\pm$.

#influence #influencetheorem #meaning -> More on influence theorem

$$\textcircled{D} \Pi \pm e \rightarrow A \quad (24.2.)$$

$\textcircled{U}$ We are obsessed with values. We even make statistics out of everything. Values never

Also a lemma upon classification may be that parts of an influence are counterproductive. Which means that an influence is not solely effective nor affective. #positivekind #negativekind

§25

Goals are set by Observers as means of desire and deflection of pain, hence achieving them is a goal in itself. In order to gain information propositions are studied using some method or outline $\textcircled{M}$ until they comply with the goal approximately $l(Z)$. If with the given propositions a method is known to generate certain properties then this method could be part of the method toward the goal. Known methods can uneffect each other which can be resolved using different methods. Alternatively the expectancy for the goal can to be lowered. Through reduction certain output properties can be silenced leading to a less directed method to be use. #limit #method

In general during the process of investigation previously sufficient entities $\Pi = 1$ might have to be revised $\Pi := \Pi < 1$ or declared unrelated $e \rightarrow a$. While progressing the sufficient and related propositions build up a web of **factual** propositions $+\Pi$ which make approaching the goal easier. #fact

§26

If obtaining a goal is not possible the observer's boundaries might not include

the goal. This may be due to insufficient rights or too strong laws on any entity. Adding or removing rules can lead to both more or less sufficiency.

§27

It takes some input propositions Π and previously established methods (possible combinations) for the input propositions $M\Pi$ next to prerequisites to become known properties of a goal $Z(\Pi)$. For a small stepped setting of goals random combinations of methods can establish prerequisites.

#propertycalculationformalism

#ai

$$\textcircled{I} (1\Pi \ 2\Pi \ \dots) =: \Pi \quad (27.1.)$$

Listing of propositions should be in the right order as baking flour before giving water to it has a negative impact $+(1\Pi \ 2\Pi) \neq -(2\Pi \ 1\Pi)$ if aiming for a cake. Also buying is a different method for which 'baking' and 'pouring water' do not need to suffice and even be counterproductive.

$$\textcircled{I} \ M\Pi \ Z(\Pi) \quad (27.2.)$$

$$\textcircled{X} \ e(\Pi \ M\Pi) = Z\Pi \quad (27.3.)$$

This means that influence of one proposition highly depends on the listing of all propositions. This listing is the method. The outcome compared to the goal confirms the input's truthness.

$$\textcircled{O} \ M\Pi \quad (27.4.)$$

But adding candles after the goal is reached adds truthness on top $M\Pi \geq Z\Pi$. Adding too many is overkill.

Neuro-functions

§28

Typical functions needed to express reality are brain functions, some of which are:

- Creation of pictures &
- Differentiation of parts as groups via properties &
- Categorization into drawers
- Sameness and neurological closeness by connection
- Formation of one to another while keeping its identity

- Evaluation as needs &
- Refinement of views/knowledge map and many more

These helpers are trained, meaning established, neuro-functions n and then by use became more efficient overall $+efficient \leftrightarrow +survival$. They also define logic through experience as another means to describe what to expect in a common sense. But in a world where expectancy is not comprehensible and things only do what they ought to do, it would be better to think of a flow - a goal-less endeavor. #sum3 #logic

§29

Additionally with neuro-functions any existing formalism, concept or calculus etc. should be expressible by its original author at some point in time. Although to publish a comprehensive, fuzzy list of functions is up to its experts, specialized environments will induce new functions and some phenomena will never be tangible through chaining or natural mutation. Maybe there will be a limit reached when people's kind knows that biology is not sufficient enough to grasp the next phenomena in line...

Ⓢ And they are trained through reading, hearing, etc. some might not even exists without education! #neuro-function

§30

Can neuro-function-based 'logical' behavior be predicted? Take any proposition II and survey people if

1. the proposition makes sense and
2. what a 'logical' consequence might be

More frequent answers 'prominent' and less frequent 'fringe' answers will come up. Those answers themselves surveyed might resolve into a very different outcome, where some prominence becomes fringe and fringe propositions become more prominent answers. #prediction

§31

One possibility to further last our survival is to keep using expectancy models to reduce complex systems to patterns and refine them over time increasing knowledge, making out dangers and controlling them or reducing dependency on I (medical advancements) and O (genetic engineering of crops). The second approach would be to accept faith and keep on living and enjoying nature or suicide. And the last possibility - overcoming brain functionality - for which any proposition seems hardly sufficient. Although there are ways to express in a lossless compression

instead of reducing it to patterns but none found are sufficiently valuable.

#survival

Ⓒ Proposition: Overcoming the brain's function. (38.1.)

§32

This again leads back to the previous problem that this time information is not reduced but selected for a purpose. The target system would end up as incomplete as before. #selection

Ⓖ Why even bother if nature were to complex to be completely expressed? (39.)

Is it? What does the people's mind gain from knowing what a people's mind may know? Knowing the limit may be a strong proposition to overcome exactly that. How far can the mind reach?

Given this it is generally assumed that people are the most 'capable' known in the whole world W . That would make the people be the most able experiencers available: most neuro-function that hold for other animals, organisms, objects also should hold for people. People are able to simulate the functions used by mice, plants, rocks and atoms (if any) if needed. This leads to a more complete picture of Z , also setting some first limits to n which could then be overcome through the use of tools. The world limit $l(WZ)$ of understanding will be reached until new forms of existence's functions can be consumed. Then either time runs out or there is nothing left for consumption making the world's growth the last opportunity to increase survival rate! #simulation

§33

Not explained yet is the layer of originality L . If the real existed Ⓒ $L = 0$ then the first picture made of its I would be on a lower layer $L = -1$, in its O higher $L = 1$. Ⓔ The structure of a molecule made of beads is a higher layer representation. For each expression on a layer a single variable suffices, from layer to layer however using those different layer variables they must be adjusted to the change in system. This is why a translation of one metric to another depends on the change of systems viewed. #layer #metric

$$Ⓓ |Metric_{Layer_1} - Metric_{Layer_2}| = |System_{Layer_1} - System_{Layer_2}| \quad (33.1.)$$

Which has lead to the representation of higher level metrics as lower level metrics and a lot of work in translation. One might ask himself why to represent in a different metric in the first place and if the increase in calculatory effort is

necessary.

Ⓘ How sufficient can a lower/higher layer representation get? (33.2.)

Ⓔ Even if every star would be matched perfectly in a virtualization of atoms then its higher layer structure would be uncontrolled and wrongly influencing its configuration. Hence virtualization only works if all layers are controlled.

#virtualization

§34

Pictures in general are solely created to comply with some ideal preimage, which is a collection of attributes. B is not B because B is itself but because B is part of the same pattern that B is part of! It is no wonder that mathematical principles are based on that very same logic of pattern recognition! The wider mathematical concepts range, the more patterns have been expressed in language. They are what further 'discoveries' were based on, or at least from which logical deduction follows. Now the ascription of values onto entities that express concept ideas and follow the known patterns is valued more true than logic. The question is why do concepts based on properties work so well in practice / in preimage simulations. Because they are made to fit in? In contrast to virtualization the preimage is not recreated but ruled. Therefore the observed is assumed to be true but only perceived in parts and only for those that (are sufficient and) hold in the respected layer of perception. So even if people do not observe the complete preimage some of the information received should be partly correct. !!Are these thoughts of a paranoid?

Ⓙ Natural sciences were expressions of recognized patterns but now are based on :

§35

Pattern recognition is based on neuro-functions. Differences in V however do not just depend on available n but the overall setting of meta level. For each entity every entity viewed has different properties. The purpose of communication is to (de-/) adjust $\rightarrow$ views and goals. Ⓔ The purpose of Abgrund is to make you adjust my believe / attributions. #adjustment

$$\textcircled{S} ZE := 1V \rightarrow 2V(\Pi) \quad (35.1.)$$

And this works well with few complete views on one hand. On the other with many incompletely stated views as source even if they adjust from the same origin through biasing some will be dismissed because of the proposition being illogical (e.g. inconsistent because parts are missing) which makes the own view become 'pseudo-'ideal based on the evaluation of propositions instead of the

full picture. Only parts are compared to the goal. #compatibilization

$$\textcircled{S} 1V \rightarrow 1B(1\Pi) 2B(2\Pi) \cancel{3B(3\Pi)} \quad (35.2.)$$

§36

Expressions $E()$ may be 'silenced' if they are of no use and hidden H and 'announced' if pulled back into expression. Given this the 'absence' is announced: unlike the negation process $n()$ which expresses something but the expressed itself - the 'freedom', the complete absence of the expressed $\cancel{E}$ - 'annihilation'.

$$\textcircled{T} 1E(2E) \cancel{1E} = \cancel{2E} \quad (36.1.)$$

Furthermore there are expressions that express nothing but their identity $i()$, they have no meaning $\emptyset$.

$$\textcircled{T} i() = \emptyset \quad (36.2.)$$

There are expressions that do not express $E()$ and there are those that negate the meaning $-()$ 'negation', where for both the understanding is rather unconventional. Upon this any property like meaning or freedom can be 'nulled', a soft annihilation.

$$\textcircled{T} (E - E) \approx 0 \quad (36.3.)$$

While we are aware of the power of negation others have not found use in our daily duties. Those absences are simple in terms of expressing them, yet combining them reveal interesting propositions:

$$\textcircled{T} pn(E) = E() \quad (36.4.)$$

And also the freedom of some annihilated expression $n(\cancel{E})$ means that E is everything as the only existence. #absence #no_paradox

§37

All of the aforementioned absences can be further refined like any other proposition: in 45.3. the meaning is negated but it does not always cancel out into the empty value. By definition some meanings may not be invertible as they do not have a counterpart or they have several (abscissa with n directions originating at the origin).

§38

How entities relate is expressed with its relation's kind $\mathfrak{R}$. Mirrored letters are used as placeholders. #relationkind

satisfactory situation for the cat in the box for the sole purpose of expressing only. Are these terms part of the field? May we call it the open field loosening its border $G : E_{F \rightarrow 0}$? What do we know if the situation has a 0.1 chance of the entity appearing? Can we from one matrix draft a border for the field of a neighboring entity $2G$? These terms put into one probably very long term then express the entity. Where some of the properties can be true and false in one term but different situations.

The occurrence of two entities however is expressed as the intersection of their respective matrices. With this the universe or all entities independently of change and relation and so on can be described by a single matrix of static properties.

A new formalism must express what properties can and do express so this is handled more easily:

p: Property (where p can be union of several p)

P: List of Properties relating (formula/term)

m: List of P for one E (where E can be union of several E)

M: List of m relating (formula)

it does not matter how you name them, the importance is from where you start and what you call it. This formalism e.g. is an entity but also a list of matrices consisting of entities themselves....

gilt für vernunftideen aber nicht für verstandskategorien

The properties may be seen as wahrnehmungen or rather p are ideas that stem from those. tools on the other hand translate wahrnehmungen into objective values. telling a relatively non-relative distance between two p.

in fact p never are the same (as they are entities) hence the identification which is unique in the first place serves as name. calling a property green is only sufficient at some particular view. otherwise the green would need to be revised.

complexity is only about having more p.

two functions growing exponentially: is the property of exponential growth for normative they can be the same. informative two greens can not even if the same number of photons erect the sense because they never do the same way may be called trope. but whether we call them x for y and w for v does not matter. but one is attributed which has been by definition the sole purpose of p onto an e. the other is an assertion attributed to nature, part of the picture itself.

§xx

Why expressing with a meta-level does not lead to an infinite regress? !!

was führt in erster linie dazu dass o auf a angewendet werden kann? nf!

was ich sagen will ist dass wir auf der falschen seite der erkenntnis nach antworten suchen. ich glaube nicht dass wir durch literal fortschritte in der wissenschaft weiterkommen sondern durch die auflösung ihrer basen. also durch hinterfragen unserer grundsätze anstelle unsere erkenntnisse auf diese zu basieren. also nicht die frage stellen warum ein apfel vom baum fällt sondern warum ich daran glaube dass dies geschieht. nein das stimmt nicht ganz, kann es gerade nicht in worte fassen... nicht die anwendung von bekannten properties a la goal theory (spezialisierung) sondern deren auflösung (differenzierung?)! zu untersuchen worauf diese selbst basieren und was für möglichkeiten lateral gegeben sind. das passt schon eher. zb können wir zahlen als mengen darstellen, dann hinterfragen wir ob es überhaupt sinn ergibt etwas zu verschachteln, ob das nicht eher eine zb nf ist.

-> hence only express rel instead of beings. exactly what abg is about:
expressing one in itself (obj), two in rel (proc) and so on

$\{P\}$ End of Proof

More on Meta

$\langle L \rangle$, $\langle Assertion \rangle$: Proofless truth

$\langle R \rangle$, $\langle Re \rangle$, $\langle Reminder \rangle$: remind of ...

$\langle W \rangle$, $\langle Who \rangle$, $\langle What \rangle$, $\langle Where \rangle$, ...: lists reference to external sources, appendices etc.

$\langle X \rangle$, $\langle Step \rangle$: next 'work-' step

$\langle Y \rangle$, $\langle Conclusion \rangle$: merge of part-results

$\langle Z \rangle$, $\langle Result \rangle$: output a wanted output

$\langle \Theta \rangle$: Theorem

$\langle \theta \rangle$: Lemma

$\langle Why \rangle$ Using this or some similar idea of meta a big blob of a general, systematic knowledge map may emerge where from one starting system through copying and refinement the path to truth is explored. $\langle Blobs \rangle$ can easily be extracted by algorithms and added to ontologies or other maps. The next one to cite this shall only need to mention the author-name and the formula/paragraph number. Looking forward an author would refine its own work, continuing the identification numbers were they left off (the next publication would start with §52.).

Kopimi and refine!

Up2nMe

- implementation for modeling/simulation (syntax is chosen by intuition not by functional use, change that)
- use in native language
- dont use latin letters
- use pictograms

Up2Me

non, its finished. no ultimate and no greater goal is achievable using knowledge or even expression. -> proven 240321 fuck god, nature and hunger